A3380-1U 6/86

INFODATA

NUCLEAR POWER FACTS AND FIGURES

April 1986

STATUS OF U.S. NUCLEAR POWER PLANTS APRIL 1, 1986

100 reactors operable*	86,418 MWe
28 reactors with construction permits	30,820 MWe
2 reactors on order	2,240 MWe
130 commitments	119,478 MWe

*Includes 93 reactors (78,799 MWe) in commercial operation,
3 reactors with full-power operating licenses, not yet commercial (Fermi 2 — 1100 MWe, River Bend 1 — 940 MWe, Millstone 3 — 1150 MWe),
4 reactors with low-power operating licenses (Shoreham — 809 MWe, Palo Verde 2 — 1270 MWe, Catawba 2 — 1145 MWe, Perry 1 — 1205 MWe)

STATUS OF WORLD NUCLEAR POWER PLANTS JANUARY 1, 1986

374 reactors operable	249,625 MWe
157 reactors under construction	141,342 MWe
116 reactors planned	112,700 MWe
647 commitments	504,267 MWe

Source: International Atomic Energy Agency

U.S. NUCLEAR MILESTONES 1985

In 1985, commercial nuclear plants produced about 15.5% of total U.S. electrical output.

U.S. nuclear plants achieved approximately 940 cumulative reactor-years of operating experience. About 3,825 reactor-years accumulated worldwide.

During 1985, 7 reactors went into commercial operation and 7 received initial operating licenses.

NUCLEAR GENERATION AND FOSSIL FUEL EQUIVALENTS

In 1985, U.S. nuclear energy generated nearly 384 billion kilowatt hours. This production at a fossil-fired plant would require burning 190 million short tons of coal, 660 million barrels of oil or 4 trillion cubic feet of natural gas.

MANUFACTURERS OF U.S. OPERATING REACTORS

Reactor manufacturer by type:

Westinghouse Electric Corporation — 40 Pressurized Water Reactors	40
General Electric Company — 35 Boiling Water Reactors, 1 Graphite Reactor	36
Combustion Engineering, Inc. — 14 Pressurized Water Reactors	14
Babcock & Wilcox Company — 8 Pressurized Water Reactors	8
General Atomic Company — 1 High Temperature Gas-Cooled Reactor	1
Allis-Chalmers — 1 Boiling Water Reactor	1
	100 units

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U.S. ENERGY *PRODUCTION* BY SOURCE, 1950-1985
[Quadrillion (10^{15}) Btu]

Year	Nuclear Quads	Nuclear % of Total	Coal Quads	Coal % of Total	Petroleum[1] Quads	Petroleum % of Total	Natural Gas (Dry) Quads	Natural Gas (Dry) % of Total	Hydro Quads	Hydro % of Total	Other[2] Quads	Other % of Total	Total Energy Production, Quads	Percent Change from Previous Year[3]
1950	0	0	14.6	42.3	12.3	35.5	6.2	18.0	1.4	4.1	[4]	[5]	34.6	12.4
1951	0	0	15.0	39.7	14.0	36.9	7.4	19.6	1.4	3.7	[4]	[5]	37.8	9.5
1952	0	0	13.2	35.8	14.3	38.6	8.0	21.5	1.5	4.0	[4]	[5]	37.0	-2.4
1953	0	0	12.7	34.2	14.7	39.5	8.3	22.4	1.4	3.8	[4]	[5]	37.2	0.8
1954	0	0	11.0	30.9	14.5	40.9	8.7	24.4	1.4	3.8	[4]	[5]	35.6	-4.5
1955	0	0	12.7	32.5	15.7	40.0	9.3	23.9	1.4	3.5	[4]	[5]	39.1	9.9
1956	0	0	13.7	33.0	16.5	39.6	10.0	24.0	1.4	3.4	[4]	[5]	41.6	6.5
1957	0	0	13.4	31.9	16.5	39.3	10.6	25.2	1.5	3.6	[4]	[5]	42.0	0.9
1958	[4]	[5]	11.2	28.5	15.5	39.5	10.9	27.9	1.6	4.1	[4]	[5]	39.2	-6.7
1959	[4]	[5]	11.1	27.1	16.3	39.9	12.0	29.2	1.6	3.8	[4]	[5]	40.9	4.3
1960	0.01	[5]	10.8	26.0	16.4	39.6	12.7	30.6	1.6	3.9	[4]	[5]	41.4	1.3
1961	0.02	0.05	10.4	24.8	16.8	40.0	13.1	31.2	1.7	4.0	[4]	[5]	41.9	1.2
1962	0.03	0.1	10.9	25.5	17.1	39.0	13.7	31.3	1.8	4.1	[4]	[5]	43.5	3.8
1963	0.04	0.1	11.8	26.4	17.7	38.3	14.5	31.3	1.8	3.9	[4]	[5]	45.8	5.2
1964	0.04	0.1	12.5	26.7	18.0	37.4	15.3	31.9	1.9	3.9	[4]	[5]	47.7	4.1
1965	0.04	0.1	13.0	26.9	18.4	37.1	15.8	31.8	2.1	4.1	[4]	[5]	49.3	3.4
1966	0.06	0.1	13.4	26.3	19.6	37.3	17.0	32.4	2.1	3.9	[4]	[5]	52.1	5.7
1967	0.09	0.2	13.8	25.6	20.8	37.6	17.9	32.4	2.4	4.2	0.01	[5]	55.0	5.5
1968	0.14	0.2	13.6	24.4	21.6	37.9	19.1	33.4	2.4	4.1	0.01	[5]	56.8	3.2
1969	0.15	0.2	13.8	23.9	22.0	37.0	20.5	34.4	2.7	4.5	0.01	[5]	59.0	4.0
1970	0.24	0.3	14.5	24.2	22.9	36.6	21.7	34.7	2.6	4.2	0.01	[5]	62.0	5.0
1971	0.41	0.7	13.1	22.0	22.6	36.6	22.3	36.2	2.8	4.5	0.01	[5]	61.2	-1.2
1972	0.58	0.9	14.5	23.1	22.6	36.0	22.2	35.4	2.9	4.6	0.03	0.1	62.4	1.8
1973	0.91	1.5	14.0	22.6	22.1	35.5	22.2	35.7	2.8	4.6	0.05	0.1	62.1	-0.6
1974	1.27	2.1	14.1	23.1	21.0	34.5	21.2	34.9	3.2	5.2	0.05	0.1	60.8	-2.0
1975	1.90	3.2	15.0	25.0	20.1	33.6	19.6	32.8	3.2	5.3	0.07	0.1	59.9	-1.6
1976	2.11	3.5	15.7	26.1	19.6	32.7	19.5	32.6	3.0	5.0	0.08	0.1	59.9	0.1
1977	2.70	4.5	15.8	26.2	19.8	32.9	19.6	32.5	2.3	3.9	0.08	0.1	60.2	0.5
1978	3.02	4.9	14.9	24.4	20.7	33.9	19.5	31.9	2.9	4.8	0.07	0.1	61.1	1.5
1979	2.78	4.4	17.5	27.5	20.4	32.0	20.1	31.5	2.9	4.6	0.09	0.1	63.8	4.4
1980	2.74	4.2	18.6	28.7	20.5	31.7	19.9	30.7	2.9	4.5	0.11	0.2	64.8	1.5
1981	3.00	4.7	18.2	28.5	20.5	31.7	19.7	30.6	2.8	4.3	0.13	0.2	64.4	-0.5
1982	3.13	4.9	18.6	29.2	20.5	32.1	18.2	28.5	3.3	5.1	0.11	0.2	63.9	-0.8
1983	3.20	5.2	17.3	28.2	20.6	33.7	16.5	27.0	3.5	5.7	0.13	0.2	61.2	-4.2
1984	3.54	5.4	19.7	30.1	21.1	32.1	17.9	27.1	3.4	5.2	0.17	0.3	65.8	7.6
1985	4.14	6.4	19.4	30.0	21.1	32.7	16.9	26.1	2.9	4.6	0.21	0.3	64.7	-1.7

[1]Includes crude oil, lease condensate and natural gas plant liquids
[2]Includes geothermal, wood and waste
[3]Percent change calculated from data prior to rounding
[4]Less than 0.005 quadrillion Btu
[5]Less than 0.05 percent

Note: Numbers may not add to totals because of independent rounding

Source: U.S. Department of Energy, Energy Information Administration, 1950 to 1972 — *1983 Annual Energy Review*, DOE/EIA-0384 (83), April 1984, p. 7; 1973-1985 — *Monthly Energy Review*, DOE/EIA-0035 (85/12), December 1985, p. 3

U.S. ENERGY *CONSUMPTION* BY SOURCE, 1950-1985
[Quadrillion (10^{15}) Btu]

Year	Nuclear Quads	Nuclear % of Total	Coal[1] Quads	Coal % of Total	Petroleum[2] Quads	Petroleum % of Total	Natural Gas (Dry) Quads	Natural Gas % of Total	Hydro Quads	Hydro % of Total	Other[3] Quads	Other % of Total	Total Energy Consumption, Quads	Percent Change from Previous Year[4]
1950	0	0	12.9	38.3	13.3	39.6	6.0	17.8	1.4	4.3	[5]	[5]	33.6	8.2
1951	0	0	13.2	36.5	14.4	40.0	7.1	19.5	1.4	4.0	[5]	[5]	36.1	7.4
1952	0	0	11.8	33.0	15.0	41.8	7.5	21.1	1.5	4.2	[5]	[5]	35.8	-0.8
1953	0	0	11.9	32.3	15.6	42.3	7.9	21.5	1.4	3.9	[5]	[5]	36.8	2.6
1954	0	0	10.2	28.5	15.8	44.3	8.3	23.3	1.4	3.9	[5]	[5]	35.7	-2.8
1955	0	0	11.5	29.4	17.3	44.0	9.0	23.0	1.4	3.6	[5]	[5]	39.2	9.6
1956	0	0	11.7	28.7	17.9	44.0	9.6	23.6	1.5	3.7	[5]	[5]	40.8	4.0
1957	0	0	11.1	27.2	17.9	43.9	10.2	25.0	1.6	3.9	0	0	40.8	0.1
1958	[5]	[6]	9.8	24.2	18.5	45.6	10.7	26.2	1.6	4.0	0	0	40.7	-0.4
1959	[5]	[6]	9.8	23.1	19.3	45.5	11.7	27.6	1.6	3.8	0	0	42.4	4.3
1960	0.01	[6]	9.8	22.3	19.9	45.5	12.4	28.3	1.7	3.8	[5]	[5]	43.8	3.2
1961	0.02	0.1	9.5	21.5	20.2	45.5	12.9	29.1	1.7	3.8	[5]	[5]	44.4	1.5
1962	0.03	0.1	9.9	21.2	21.1	45.3	13.7	29.5	1.8	3.9	[5]	[5]	46.5	4.7
1963	0.04	0.1	10.4	21.5	21.7	45.0	14.4	29.8	1.8	3.7	[5]	[6]	48.3	3.8
1964	0.04	0.1	10.9	21.6	22.3	44.2	15.3	30.3	1.9	3.8	[5]	[5]	50.4	4.5
1965	0.04	0.1	11.5	21.8	23.3	44.2	15.8	30.0	2.1	3.9	[5]	[5]	52.6	4.3
1966	0.06	0.1	12.1	21.7	24.4	43.9	17.0	30.6	2.1	3.7	[5]	[5]	55.6	5.7
1967	0.09	0.2	11.8	20.6	25.3	44.0	17.9	31.2	2.3	4.1	0.01	[6]	57.5	3.4
1968	0.14	0.2	12.3	20.1	27.0	44.3	19.2	31.5	2.3	3.8	0.01	[6]	60.9	6.0
1969	0.15	0.2	12.3	19.1	28.3	44.2	20.7	32.3	2.7	4.1	0.01	[6]	64.1	5.2
1970	0.24	0.4	12.1	18.3	29.5	44.5	21.8	32.8	2.7	4.0	0.01	[6]	66.4	3.5
1971	0.41	0.6	11.5	17.0	30.6	45.1	22.5	33.1	2.9	4.2	0.01	[6]	67.8	2.2
1972	0.58	1.1	12.0	16.8	33.0	46.3	22.7	31.9	2.9	4.1	0.03	[6]	71.2	5.0
1973	0.91	1.2	13.0	17.5	34.8	46.9	22.5	30.3	3.0	4.0	0.04	0.1	74.3	4.4
1974	1.27	1.8	12.7	17.5	33.5	46.1	21.7	30.0	3.3	4.6	0.11	0.1	72.6	-2.3
1975	1.90	2.7	12.7	18.1	32.7	46.4	20.0	28.3	3.2	4.6	0.09	0.1	70.6	-2.8
1976	2.11	2.8	13.6	18.3	35.2	47.3	20.3	27.4	3.1	4.1	0.08	0.1	74.4	5.4
1977	2.70	3.5	13.9	18.3	37.1	48.7	19.9	26.1	2.5	3.3	0.10	0.1	76.3	2.6
1978	3.02	3.9	13.8	17.6	38.0	48.6	20.0	25.6	3.1	4.0	0.19	0.2	78.1	2.4
1979	2.78	3.5	15.0	19.1	37.1	47.1	20.7	26.2	3.1	4.0	0.15	0.2	78.9	1.0
1980	2.74	3.6	15.4	20.3	34.2	45.0	20.4	26.8	3.1	4.1	0.08	0.1	76.0	-3.7
1981	3.00	4.1	15.9	21.5	31.9	43.1	19.9	26.9	3.1	4.2	0.11	0.2	74.0	-2.6
1982	3.13	4.4	15.3	21.6	30.2	42.7	18.5	26.1	3.6	5.0	0.09	0.1	70.8	-4.3
1983	3.20	4.5	15.9	22.5	30.1	42.6	17.4	24.6	3.9	5.5	0.12	0.2	70.5	-0.5
1984	3.54	4.8	17.1	23.0	31.0	42.1	18.5	25.0	3.8	5.1	0.16	0.2	74.1	4.6
1985	4.14	5.6	17.5	23.7	30.8	41.8	17.8	24.1	3.4	4.6	0.20	0.3	73.8	-0.4

[1]Includes net imports of coke.
[2]Includes natural gas plant liquids and crude oil burned as fuel.
[3]Includes geothermal, wood and waste.
[4]Percent change calculated from data prior to rounding.
[5]Less than 0.005 quadrillion Btu.
[6]Less than 0.05 percent.

Note: Numbers may not add to totals because of independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, 1950 to 1972 — *1983 Annual Energy Review*, DOE/EIA-0384 (83), April 1984, p. 9; 1973-1984 — *Monthly Energy Review*, DOE/EIA-0035 (85/12), December 1985, p. 4.

U.S. INSTALLED ELECTRICAL GENERATING *CAPACITY* BY PRIME MOVER, 1950-1985

(Name plate rating in thousands of megawatts)

End of Year	Nuclear Power MWe	Nuclear Power % of Total	Conventional Steam[1] MWe	Conventional Steam[1] % of Total	Internal Combustion MWe	Internal Combustion % of Total	Gas Turbine MWe	Gas Turbine % of Total	Hydropower MWe	Hydropower % of Total	Geothermal MWe	Geothermal % of Total	Total Installed Capacity, MWe	Percent Increase over Previous Year
1950	0	0	49.3	71.6	1.9	2.7	0	0	17.7	25.7	0	0	68.9	9.2
1951	0	0	54.9	72.4	2.0	2.6	0	0	18.9	24.9	0	0	75.8	10.0
1952	0	0	59.7	72.6	2.1	2.5	0	0	20.4	24.8	0	0	82.2	8.4
1953	0	0	67.2	73.4	2.2	2.4	0	0	22.0	24.0	0	0	91.5	11.3
1954	0	0	77.1	75.1	2.3	2.2	0	0	23.2	22.6	0	0	102.6	12.1
1955	0	0	87.1	76.1	2.4	2.1	0	0	25.0	21.8	0	0	114.5	11.6
1956	0	0	92.6	76.7	2.5	2.1	0	0	25.7	21.3	0	0	120.7	5.4
1957	0.1	0.1	99.4	77.0	2.5	2.0	0	0	27.0	20.9	0	0	129.1	7.0
1958	0.1	0.1	110.5	77.5	2.6	1.8	0	0	29.4	20.6	0	0	142.6	10.5
1959	0.1	0.1	123.0	78.4	2.7	1.7	0	0	31.1	19.8	0	0	156.8	10.0
1960	0.3	0.2	132.1	78.7	2.8	1.7	0	0	32.4	19.3	[2]	[3]	168.0	7.1
1961	0.4	0.2	141.8	78.5	3.0	1.7	0	0	35.5	19.6	[2]	[3]	180.7	7.6
1962	0.7	0.4	150.0	78.5	3.0	1.6	0	0	37.3	19.5	[2]	[3]	191.1	5.8
1963	0.7	0.4	165.7	78.7	3.2	1.5	0.6	0.3	40.2	19.1	[2]	[3]	210.5	10.2
1964	0.9	0.4	175.0	78.7	3.3	1.5	0.9	0.4	42.2	19.0	[2]	[3]	222.3	5.6
1965	0.9	0.4	186.6	79.0	3.4	1.4	1.4	0.6	43.8	18.6	[2]	[3]	236.1	6.2
1966	1.9	0.8	195.4	78.8	3.5	1.4	2.0	0.8	45.0	18.2	[2]	[3]	247.8	5.0
1967	2.9	1.1	211.1	78.4	3.8	1.4	3.3	1.2	48.1	17.9	0.1	[3]	269.3	8.7
1968	2.8	1.0	226.8	77.9	4.0	1.4	6.2	2.1	51.2	17.6	0.1	[3]	291.1	8.1
1969	4.0	1.3	242.2	77.3	4.2	1.3	10.1	3.2	52.8	16.9	0.1	[3]	313.3	7.6
1970	6.5	1.9	260.0	76.1	4.4	1.3	15.5	4.6	55.1	16.1	0.1	[3]	341.6	9.0
1971	8.7	2.4	277.8	75.3	4.5	1.2	21.9	5.9	55.9	15.1	0.2	0.1	368.9	8.0
1972	15.3	3.8	294.1	73.8	4.8	1.2	27.7	6.9	56.4	14.2	0.3	0.1	398.6	8.1
1973	21.0	4.7	320.6	72.5	5.0	1.1	33.4	7.6	62.0	14.0	0.4	0.1	442.4	11.0
1974	31.6	6.6	337.3	70.6	5.0	1.1	39.6	8.3	63.6	13.3	0.4	0.1	477.6	8.0
1975	39.8	7.8	352.9	69.4	5.1	1.0	44.1	8.7	65.9	13.0	0.6	0.1	508.3	6.4
1976	42.9	8.1	367.9	69.3	5.3	1.0	46.6	8.8	67.7	12.7	0.6	0.1	531.0	4.5
1977	49.9	8.9	387.8	69.2	5.3	0.9	47.9	8.6	68.7	12.3	0.6	0.1	560.2	5.5
1978	53.5	9.2	399.5	69.0	5.5	0.9	49.0	8.5	71.0	12.3	0.6	0.1	579.2	3.4
1979	54.6	9.1	411.6	68.9	5.5	0.9	50.6	8.5	75.3	12.6	0.7	0.1	598.3	3.3
1980	56.5	9.2	423.5	69.0	5.5	0.9	50.6	8.3	76.4	12.4	1.0	0.2	613.5	2.5
1981	60.8	9.6	438.9	69.1	5.6	0.9	51.4	8.1	77.1	12.1	1.0	0.2	634.8	3.5
1982	63.0	9.7	450.9	69.3	5.1	0.8	51.8	8.0	78.1	12.0	1.1	0.2	650.1	2.4
1983	67.1	10.2	454.1	69.1	5.0	0.8	51.6	7.9	79.0	12.0	1.3	0.2	657.0	1.1
1984	71.7	10.7	461.7	68.7	4.8	0.7	51.8	7.7	80.5	12.0	1.4	0.2	672.0[4]	2.3
1985	80.4	11.7	467.1	67.9	5.0	0.7	51.3	7.5	83.0	12.1	1.7	0.2	688.4[5]	2.4

[1]Includes capacity at plants that produce steam from coal, petroleum, natural gas and biomass.
[2]Less than 0.05 thousand megawatts.
[3]Less than 0.05 percent.
[4]Includes 10 megawatts in wind-turbine capacity and 1 megawatt in solar capacity.
[5]Includes 7 megawatts in wind-turbine capacity and 1 megawatt in solar capacity.

Note: Numbers may not add to totals because of independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, 1950 to 1983 — *1983 Annual Energy Review*, DOE/EIA-0384 (83), April 1984, p. 201; 1984 — *Electric Power Monthly*, DOE/EIA-0226 (84/12), December 1984, p. 3; 1985 — *Electric Power Monthly*, DOE/EIA-0226 (85/12), December 1985, p. 3.

U.S. ELECTRICAL *GENERATION* BY SOURCE, 1950-1984
(Billion kilowatt-hours)

Year	Nuclear kwh	Nuclear % of Total	Coal kwh	Coal % of Total	Oil kwh	Oil % of Total	Gas kwh	Gas % of Total	Hydro kwh	Hydro % of Total	Other[1] kwh	Other[1] % of Total	Total Electric Generation kwh	Percent Increase over Previous Year
1950	0	0	155	47.1	34	10.3	45	13.7	96	29.2	[2]	[3]	329	13.1
1951	0	0	185	49.9	29	7.8	57	15.4	100	27.0	[2]	[3]	371	12.8
1952	0	0	195	48.9	30	7.5	68	17.0	105	26.3	[2]	[3]	399	7.6
1953	0	0	219	49.4	38	8.6	80	18.1	105	23.7	[2]	[3]	443	11.0
1954	0	0	239	50.6	32	6.8	94	19.9	107	22.7	[2]	[3]	472	6.5
1955	0	0	301	55.0	37	6.8	95	17.4	113	20.7	[2]	[3]	547	15.9
1956	0	0	339	56.4	36	6.0	104	17.3	122	20.3	[2]	[3]	601	9.9
1957	[2]	[3]	346	54.8	40	6.4	114	18.1	130	20.6	[2]	[3]	632	5.2
1958	[2]	[3]	344	53.4	40	6.2	120	18.6	140	21.7	[2]	[3]	645	2.1
1959	[2]	[3]	378	53.2	47	6.6	147	20.7	138	19.4	[2]	[3]	710	10.1
1960	1	0.1	403	53.3	48	6.3	158	20.9	146	19.3	[2]	[3]	756	6.5
1961	2	0.3	422	53.1	49	6.2	169	21.3	152	19.1	[2]	[3]	794	5.0
1962	2	0.2	450	52.6	49	5.7	184	21.5	169	19.8	[2]	[3]	855	7.7
1963	3	0.3	494	53.9	52	5.7	202	22.0	166	18.1	[2]	[3]	917	7.5
1964	3	0.3	526	53.5	57	5.8	220	22.4	177	18.0	[2]	[3]	984	7.3
1965	4	0.4	571	54.1	65	6.1	222	21.0	194	18.4	[2]	[3]	1,055	7.2
1966	6	0.5	613	53.6	79	6.9	251	21.9	195	17.0	1	0.1	1,144	8.4
1967	8	0.6	630	51.9	89	7.3	265	21.8	222	18.3	1	0.1	1,214	6.1
1968	13	1.0	685	51.5	104	7.8	304	22.9	222	16.7	1	0.1	1,329	9.5
1969	14	1.0	706	48.9	138	9.6	333	23.1	250	17.3	1	0.1	1,442	8.5
1970	22	1.4	704	46.0	184	12.0	373	24.3	248	16.2	1	0.1	1,522	6.2
1971	38	2.4	713	44.2	220	13.6	374	23.2	266	16.5	1	0.1	1,613	5.3
1972	54	3.1	771	44.1	274	15.6	376	21.5	273	15.6	2	0.1	1,750	8.5
1973	83	4.5	848	45.6	314	16.9	341	18.3	272	14.6	2	0.1	1,861	6.3
1974	114	6.1	828	44.4	301	16.1	320	17.1	301	16.1	3	0.2	1,867	0.3
1975	173	9.0	853	44.5	289	15.1	300	15.6	300	15.6	3	0.2	1,918	2.7
1976	191	9.4	944	46.3	320	15.7	295	14.5	284	13.9	4	0.2	2,038	6.3
1977	251	11.8	985	46.4	358	16.8	306	14.4	220	10.4	4	0.2	2,124	4.2
1978	276	12.5	976	44.2	365	16.6	305	13.8	280	12.7	3	0.2	2,206	3.9
1979	255	11.4	1,075	47.8	304	13.5	329	14.7	280	12.4	4	0.2	2,247	1.9
1980	251	11.0	1,162	50.8	246	10.8	346	15.1	276	12.1	6	0.2	2,286	1.7
1981	273	11.9	1,203	52.4	206	9.0	346	15.1	261	11.4	6	0.2	2,295	0.4
1982	283	12.6	1,192	53.2	147	6.6	305	13.6	309	13.8	5	0.2	2,241	-2.4
1983	294	12.7	1,259	54.5	144	6.2	274	11.9	332	14.4	7	0.3	2,310	3.1
1984	328	13.6	1,342	55.5	120	5.0	297	12.3	321	13.3	9	0.3	2,416	4.6
1985	384	15.5	1,401	56.8	100	4.1	291	11.8	282	11.4	11	0.4	2,469	2.2

[1]Includes geothermal, wood and waste.
[2]Less than 0.5 billion kilowatt-hours.
[3]Less than 0.05 percent.

Note: Numbers may not add to totals because of independent rounding.

Source: U.S. Department of Energy, Energy Information Administration, 1950 to 1972 — *1983 Annual Energy Review*, DOE/EIA-0384 (83), April 1984, p. 195; 1973-1985 — *Monthly Energy Review*, DOE/EIA-0035 (85/12), December 1985, p. 78

NUCLEAR ELECTRICAL CAPACITY AND GENERATION AND SHARE OF TOTAL ENERGY PRODUCTION

Year	Capacity		Generation		Energy Production	
	Thousand MWe	% of Total	Billion kwh	% of Total	Nuclear Quads[1]	% of Total Energy
1957	0.1	0.1	([2])	([3])	0	0
1958	0.1	0.1	([2])	([3])	([4])	([3])
1959	0.1	0.1	([2])	([3])	([4])	([3])
1960	0.3	0.2	1	0.1	([4])	([3])
1961	0.4	0.2	2	0.3	([4])	0.1
1962	0.7	0.4	2	0.2	([4])	0.1
1963	0.7	0.3	3	0.3	([4])	0.1
1964	0.9	0.4	3	0.3	([4])	0.1
1965	0.9	0.4	4	0.4	([4])	0.1
1966	1.9	0.8	6	0.5	0.1	0.1
1967	2.9	1.1	8	0.7	0.1	0.2
1968	2.8	1.0	13	1.0	0.1	0.2
1969	4.0	1.3	14	1.0	0.2	0.3
1970	6.5	1.9	22	1.4	0.2	0.4
1971	8.7	2.4	38	2.4	0.4	0.7
1972	15.3	3.8	54	3.1	0.6	0.9
1973	21.0	4.7	83	4.5	0.9	1.5
1974	31.6	6.6	114	6.1	1.3	2.1
1975	39.8	7.8	173	9.0	1.9	3.2
1976	42.9	8.1	191	9.4	2.1	3.5
1977	49.9	8.9	251	11.8	2.7	4.5
1978	53.5	9.2	276	12.5	3.0	5.0
1979	54.6	9.1	255	11.3	2.8	4.4
1980	56.5	9.2	251	11.0	2.7	4.2
1981	60.8	9.6	273	11.9	3.0	4.7
1982	63.0	9.7	283	12.6	3.1	4.9
1983	67.1	10.2	294	12.7	3.2	5.2
1984	71.7	10.7	328	13.6	3.5	5.4
1985	80.4	11.7	384	15.5	4.1	6.4
1990	105.1	15.3	574	19.6	6.3	8.9
1995	110.6	15.2	644	18.9	7.1	9.9

[1]One quad equals quadrillion (10^{15}) Btu.
[2]Less than 0.5 billion kilowatt-hours.
[3]Less than 0.05 percent.
[4]Less than 0.05 quads.

Note: Projections are based on DOE's Scenario A, a reference mid case.

Capacity figures through 1985 are nameplate ratings. Data for 1990 and 1995 are net summer capability.

Source: U.S. Department of Energy, Energy Information Administration, 1957 to 1972 — Office of Energy Markets and End Use, *1983 Annual Energy Review*, DOE/EIA-0384 (83), April 1984, pp. 7, 171, 181; 1973-1985 — *Monthly Energy Review*, DOE/EIA-0035 (85/12), December 1984, pp. 9 and 78, *Electric Power Monthly*, DOE/EIA-0226 (85/12), December 1985, p. 3; 1990 and 1995 — *Annual Energy Outlook 1985*, DOE/EIA-0383 (85), February 1986, pp. 47 and 51.

STATE AND REGIONAL ELECTRICAL GENERATION BY NUCLEAR POWER, 1985

Ranking by Percent	*State*	Nuclear Generation (million kwh)	Nuclear as Percent of *State* Total kwh
1	Vermont	2,999	71.7
2	South Carolina	31,826	59.4
3	Maine	5,354	58.6
4	Virginia	22,303	53.0
5	New Jersey	17,770	51.7
6	Connecticut	12,721	50.4
7	Illinois	39,106	37.7
8	Minnesota	11,572	37.4
9	Maryland	9,926	30.7
10	Arkansas	9,889	27.8
11	Wisconsin	10,979	26.7
12	Nebraska	4,134	25.9
13	North Carolina	19,303	25.9
14	Florida	23,461	24.3
15	Mississippi	4,332	22.6
16	New York	24,092	21.6
17	Alabama	14,313	19.7
18	Pennsylvania	26,232	19.4
19	Michigan	13,452	18.1
20	Massachusetts	6,133	16.9
21	California	19,726	15.4
22	Tennessee	9,672	14.5
23	Oregon	6,911	14.3
24	Kansas	3,856	14.0
25	Missouri	8,030	14.0
26	Georgia	10,130	12.5
27	Washington	8,038	8.6
28	Iowa	1,927	8.2
29	Louisiana	2,440	5.5
30	Arizona	1,130	2.4
31	Ohio	1,943	1.8
32	Colorado	−32	−0.1

Total: 32 states = 383,688 million kwh nuclear

Ranking by Percent	*Region*	Nuclear Generation (million kwh)	Nuclear as Percent of *Regional* Total kwh
1	New England (CT, ME, MA, NH, RI, VT)	27,208	33.4
2	South Atlantic (DE, DC, WV, FL, GA, MD, NC, SC, VA)	116,950	25.0
3	Middle Atlantic (NJ, NY, PA)	68,094	24.2
4	East North Central (IL, MI, WI, OH, IN)	65,480	16.0
5	West North Central (IA, MN, MO, NE, KS, ND, SD)	29,519	16.0
6	Pacific Contiguous (CA, OR, WA)	34,675	12.9
7	East South Central (AL, MS, TN, KT)	28,317	12.8
8	West South Central (AR, LA, OK, TX)	12,347	3.6
9	Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	1,098	0.5
10	Pacific Noncontiguous (AK, HI)	0	0.0

Total: 10 regions = 383,688 million kwh nuclear

The above tables indicate the amount of electricity generated by nuclear power only in those states having nuclear generating capability and in all regions of the United States. Data do not necessarily indicate the amount of electricity actually consumed in a state or region since in some instances a portion of the electricity generated by a utility's power plants in one state is sold to and used by customers in another state.

Source: U.S. Department of Energy, Energy Information Administration, *Electric Power Monthly*, DOE/EIA-0226, (85/12), December 1985, p. 16.

PROFILE OF U.S. REACTORS GOING INTO COMMERCIAL OPERATION

	Additions per year[a]		Cumulative	
End of Year	No. of Units	Net MWe	No. of Units	Net MWe
1985	7	7,903	90	75,368
1986	14	15,420	104	90,788
1987	8	9,013	112	99,801
1988	4	4,569	116	104,370
1989	1	1,250	117	105,620
1990	2	2,305	119	107,925
...and beyond[b]	11	11,553	130	119,478

[a]Based on projected commercial operation dates in AIF's January 1986 status report of U.S. reactors.
[b]Accounts for five reactors (4,873 MWe) with construction permits, the operating dates of which have been indefinitely deferred; two reactors (2,426 MWe) under construction and two reactors (2,240 MWe) on order with operating dates beyond 1990; one reactor (1,205 MWe) with construction reduced to minimum work level and operation date uncertain and one reactor (809 MWe) with no projected operation date.

AVERAGE LEAD TIME FOR U.S. NUCLEAR POWER PLANTS BY YEAR OF COMMERCIAL OPERATION, 1970-1985

Initial Year of Commercial Operation	No. of Units	Capacity (MWe)	Duration of Activity in Months				
			Pre-Licensing[1]	Licensing[2]	Construction[3]	Fuel Loading and Startup[4]	Total Lead Time Months/Years
1970	3	1,761	3.7	8.3	42.3	5.7	60.0 / 5.0
1971	5	3,504	3.6	8.4	46.0	8.2	66.2 / 5.5
1972	6	3,972	7.7	13.3	49.0	6.7	76.7 / 6.4
1973	8	6,389	2.3	12.1	60.1	9.9	84.4 / 7.0
1974	12	9,999	3.8	12.0	69.2	7.9	92.9 / 7.8
1975	9	7,709	5.9	16.3	61.3	9.9	93.4 / 7.8
1976	3	2,925	6.6	22.0	67.0	7.7	103.3 / 8.6
1977	7	6,310	6.6	19.1	82.7	8.0	116.4 / 9.7
1978	4	3,819	11.2	19.3	89.5	9.8	129.8 / 10.8
1979	2	1,114	12.5	26.0	64.5	41.0	144.0 / 12.0
1980	2	1,819	2.0	25.0	89.5	13.0	129.5 / 10.8
1981	4	4,272	5.2	21.2	112.3	13.8	152.5 / 12.7
1982	1	1,148	6.0	19.0	133.0	12.0	170.0 / 14.2
1983	3	2,949	20.0	39.0	91.7	11.0	161.7 / 13.5
1984	7	7,587	6.6	28.3	113.6	13.4	161.8 / 13.5
1985	7	7,918	13.0	30.4	115.9	17.6	176.9 / 14.7

[1]From nuclear steam supply system (NSSS) order to docketing of the construction permit (CP) by NRC.
[2]From CP docketing to CP issuance by NRC.
[3]From CP issuance to issuance of the operating license (OL) by NRC.
[4]From OL issuance to commercial operation.

Source: U.S. Department of Energy, Office of Converter Reactor Deployment, *U.S. Central Station Nuclear Electric Generating Units: Significant Milestones*, DOE/NE-0030/12, May 1985, pp. 3-14; dates of 1985 events from *Electricity from Nuclear Power*, Atomic Industrial Forum, January 1986.

U.S. AVERAGE ELECTRICAL GENERATING COSTS AND POWER PLANT PERFORMANCE IN 1984

For units entering commercial service in the years listed[1]

NUCLEAR

Initial Year of Commercial Operation	Number of Units	Generating Capacity (MWe)	Total[2] Generating Cost (¢/kwh)	Capital Cost (¢/kwh)	Fuel Cost (¢/kwh)	O & M Cost (¢/kwh)	Other[3] Cost (¢/kwh)	Capacity[4] Factor (%)	Availability[5] Factor (%)	Forced[6] Outage Rate (%)
1970	4	2,358	2.8	1.0	0.8	1.0	0.0	71.9	75.4	2.2
1971	4	2,609	13.6	7.1	0.9	5.4	0.2	14.4	17.3	33.6
1972	8	5,448	3.2	1.3	0.7	1.0	0.2	59.4	63.9	5.6
1973	7	5,167	2.8	1.2	0.7	0.8	0.1	66.3	70.8	13.4
1974	11	8,714	2.7	1.2	0.7	0.7	0.1	66.8	73.6	5.4
1975	8	6,775	3.5	1.7	0.7	1.0	0.1	66.8	72.9	13.5
1976	4	3,654	4.2	2.1	0.9	1.1	0.1	61.3	65.3	7.4
1977	7	5,860	5.1	2.9	0.7	1.4	0.1	52.1	59.2	14.1
1978	2	1,990	3.7	2.4	0.6	0.7	0.0	52.3	54.8	11.5
1979	1	731	9.8	5.9	0.7	3.2	0.0	28.7	32.2	8.3
1980	2	1,748	3.2	1.8	0.8	0.6	0.0	71.0	75.9	6.4
1981	4	4,079	4.5	2.9	0.7	0.9	0.0	58.3	64.3	24.6
1982	1	1,148	3.0	1.8	0.7	0.5	0.0	78.9	86.7	8.9
1983	3	2,736	9.4	7.2	0.8	1.4	0.0	65.7	70.7	11.3
1984*	2	1,921	8.0	5.9	0.8	1.2	0.1	55.6	65.2	14.2
Totals or Weighted Averages, 1984	**68**	**54,941**	**4.1**	**2.3**	**0.7**	**1.0**	**0.1**	**60.1**	**65.1**	**10.9**

COAL

Initial Year of Commercial Operation	Number of Units	Generating Capacity (MWe)	Total[2] Generating Cost (¢/kwh)	Capital Cost (¢/kwh)	Fuel Cost (¢/kwh)	O & M Cost (¢/kwh)	Other[3] Cost (¢/kwh)	Capacity[4] Factor (%)	Availability[5] Factor (%)	Forced[6] Outage Rate (%)
1970	4	1,813	3.2	1.0	1.7	0.5	0.0	50.3	68.5	24.8
1971	10	6,587	3.1	0.9	1.7	0.5	0.0	59.5	75.7	12.5
1972	7	4,403	3.2	0.8	2.0	0.4	0.0	62.0	79.2	7.8
1973	7	6,128	2.7	0.7	1.8	0.2	0.0	63.0	81.6	8.0
1974	5	4,280	3.0	0.7	2.0	0.3	0.0	61.0	82.9	5.6
1975	6	4,634	3.4	0.9	2.2	0.3	0.0	50.6	74.9	8.8
1976	3	2,276	3.3	1.1	1.8	0.4	0.0	73.7	91.1	3.9
1977	2	1,407	3.6	1.3	1.8	0.5	0.0	68.0	85.9	6.3
1978	4	2,202	3.6	1.2	2.1	0.3	0.0	65.8	86.7	2.8
1979	3	1,284	3.2	1.6	1.3	0.3	0.0	52.8	83.3	1.8
1980	6	4,371	4.9	2.4	2.1	0.4	0.0	60.5	88.3	3.3
1981	2	707	3.9	1.7	2.0	0.2	0.0	58.8	87.3	1.2
1982	3	2,318	4.7	2.2	2.2	0.3	0.0	46.0	87.0	2.3
1983	2	854	5.3	2.8	2.1	0.2	0.2	60.7	79.0	1.7
Totals or Weighted Averages, 1984	**64**	**43,269**	**3.4**	**1.2**	**1.9**	**0.3**	**0.0**	**59.6**	**81.0**	**7.7**

OIL

Initial Year of Commercial Operation	Number of Units	Generating Capacity (MWe)	Total[2] Generating Cost (¢/kwh)	Capital Cost (¢/kwh)	Fuel Cost (¢/kwh)	O & M Cost (¢/kwh)	Other[3] Cost (¢/kwh)	Capacity[4] Factor (%)	Availability[5] Factor (%)	Forced[6] Outage Rate (%)
1970	0	—	—	—	—	—	—	—	—	—
1971	1	410	7.3	1.0	5.7	0.6	0.0	30.9	83.7	12.3
1972	1	401	7.4	1.9	5.2	0.3	0.0	23.0	69.4	0.5
1973	1	400	9.6	2.5	6.4	0.7	0.0	15.6	90.0	18.6
1974	4	1,390	6.4	1.5	4.7	0.2	0.0	41.1	90.2	1.7
1975	1	565	6.0	1.4	4.3	0.3	0.0	62.6	82.0	7.4
1976	1	783	6.6	1.6	4.6	0.4	0.0	29.0	83.8	7.8
1977	2	1,608	8.6	2.6	5.3	0.7	0.0	18.2	57.1	4.0
1978	1	509	6.9	2.0	4.7	0.2	0.0	19.5	85.4	6.7
1979	0	—	—	—	—	—	—	—	—	—
1980	1	783	10.6	5.4	5.0	0.2	0.0	18.9	84.0	5.4
1981	1	783	8.3	3.3	4.8	0.2	0.0	27.2	70.4	5.0
1982	0	—	—	—	—	—	—	—	—	—
1983	0	—	—	—	—	—	—	—	—	—
Totals or Weighted Averages, 1984	**14**	**7,632**	**7.4**	**2.1**	**4.9**	**0.4**	**0.0**	**28.6**	**80.3**	**4.9**

[1] Base-load units of 400 MWe or larger capacity, entering commercial operation from 1970 through 1984 and in commercial service during all of 1984. The capacity of all utilities having at least a 10 per cent interest in one or more nuclear units is included.

[2] Total cost includes capital, fuel, operation and maintenance, carrying charges, insurance and taxes as well as costs incurred while any unit was not on line but remained in commercial status during the year. For nuclear units, "total cost" includes present allowances for decommissioning and waste management, where permitted by state regulatory authorities.

[3] Other cost represents generating expenses not recorded by the reporting utilities in capital, fuel or operation and maintenance categories.

[4] Capacity factor is the percentage of electricity produced compared with the amount which could have been produced at continuous full power.

[5] Availability factor is the percentage of time during which the unit was capable of producing power at some level, whether or not it was actually in service.

[6] Forced outage rate is the percentage of time during which the unit was not available to produce power when required, due to component or other failure.

* Two nuclear units began commercial operation on January 1, 1984.

U.S. EMPLOYMENT REQUIREMENTS IN THE NUCLEAR POWER INDUSTRY, CURRENT AND PROJECTED

Occupation	Actual Positions 1985[1] On-Site	Off-Site	Total	Projected Positions 1995	Percent Change in Positions 1985-1995
Managers & Supervisors	6,950	2,542	9,492	9,591	1.0
Engineers	7,083	5,243	12,326	11,549	-6.3
Chemical	179	109	288	285	-1.0
Civil	131	429	560	553	-1.3
Electrical	924	597	1,521	1,422	-6.5
Instrument & control	420	303	723	667	-7.7
Mechanical	1,360	1,080	2,440	2,319	-5.0
Nuclear & reactor	863	790	1,653	1,815	9.8
Quality assurance/control	707	651	1,358	1,036	-23.7
Radiation protection	163	63	226	235	4.0
Other engineers	2,336	1,221	3,557	3,217	-10.0
Scientists	812	424	1,236	1,317	10.9
Biologists	67	42	109	113	3.7
Chemists	215	84	299	316	5.7
Health physicists	345	174	519	600	15.6
Other scientists	185	124	309	342	10.7
Training Personnel	1,915	610	2,525	2,766	9.5
SRO/RO licensed/certified instructors	575	140	715	800	11.9
Other technical/scientific instructors	657	236	893	959	7.4
Other instructors	389	108	497	581	16.9
Support staff	294	126	420	426	1.4
Operators	8,539	38	8,577	8,739	1.9
Shift technical advisors	490	17	507	564	11.2
Shift supervisors	1,006	3	1,009	1,044	3.5
Senior licensed operators (SRO)	642	0	642	837	30.4
Licensed operators (RO)	1,654	0	1,654	2,057	24.4
Non-licensed shift operators	2,832	3	2,835	2,814	-0.7
Other non-licensed operators	538	0	538	568	5.6
Trainees for SRO licenses	412	0	412	229	-44.4
Trainees for RO licenses	553	0	553	317	-42.7
Trainees for non-licensed positions	412	15	427	309	-27.6
Technical & Maintenance Personnel	18,715	3,018	21,733	22,087	1.6
Chemistry technicians	1,335	58	1,393	1,491	7.0
Radiation protection technicians	2,718	58	2,776	2,728	-1.7
Draftsmen	193	917	1,110	1,144	3.1
Electricians	1,891	311	2,202	2,320	5.4
Instrument & control technicians	3,298	107	3,405	3,284	-3.6
Mechanics	4,055	617	4,672	5,127	9.7
Quality assurance/control technicians	1,003	197	1,200	1,165	-2.9
Welders with nuclear certification	545	269	814	867	6.5
Other technical & maintenance personnel	3,667	484	4,161	3,961	-4.8
Other Professional Workers	1,856	1,033	2,889	3,193	10.5
Other Technical Personnel	1,857	644	2,501	2,505	0.2
Subtotal	47,727	13,552	61,279	61,801	0.9
All Other Workers[2]	13,149	2,795	15,944	–	–
Total	60,876	16,347	77,223	–	–

[1]Total authorized positions as of March 1, 1985.
[2]All other workers include security, clerical and non-skilled positions. Projections are not made for this category.

Note: Employment represents permanent, full-time positions reported by 55 utilities, members of the Institute of Nuclear Power Operations, that operate or are constructing 126 units (81 operating, 38 under construction and 7 on hold) at 80 nuclear power plant sites.

Source: Institute of Nuclear Power Operations, *1985 Survey of Nuclear-related Employment in U.S. Electric Utilities*, INPO85-034, October 1985, pp. 5, 7-10, 15, 16, A-5.

DOMESTIC URANIUM REQUIREMENTS
(U_3O_8 Equivalent)

Year	Short tons
1984	16,800
1985	16,400
1990	18,600
1995	20,150
2000	25,700

Source: U.S. Department of Energy, *World Nuclear Fuel Cycle Requirements 1985*, DOE/EIA-0436 (85), December 1985, pg. 14.

This table uses the mid-range forecast figures.

U.S. URANIUM RESOURCES as of December 31, 1984
(Short Tons U_3O_8)

Forward Cost	Reasonably Assured Resources	Estimated Additional Resources
< $30/lb U_3O_8	179,500	659,000
$30-$50/lb U_3O_8	373,500	503,000
$50-$100/lb U_3O_8	306,500	702,000
Total	859,500	1,864,000

Source: U.S. Department of Energy, *Uranium Industry Annual 1984*, DOE/EIA-0478 (84), October 1985, pp. 31 and 36.

DOMESTIC URANIUM (U_3O_8) PRODUCED IN 1984

State	Short Tons	% of Total
Wyoming	1,560	21.0
New Mexico	1,458	19.6
Texas	1,310	17.6
Others	3,113	41.8
Totals	7,441	100.0

Source: U.S. Department of Energy, *Uranium Industry Annual 1984*, DOE/EIA-0478 (84), October 1985, pg. 49.

NUCLEAR ELECTRICAL GENERATION IN OECD COUNTRIES [1] CURRENT AND PROJECTED

Country	1985 Billion kwh	1985 % Nuclear	1990 Billion kwh	1990 % Nuclear	1995 Billion kwh	1995 % Nuclear
Belgium	32.7	63.5	35.6	61.2	40.2	65.6
Canada	57.1	12.8	93.6	19.0	108.2	20.1
Finland	18.0	38.2	15.7	31.4	19.1	33.5
France	213.1	64.8	270.2	73.0	326.0[2]	74.9
Germany, FR	119.6	31.2	136.0	34.4	136.0	32.5
Italy	6.8	3.9	17.3	7.5	34.6	12.8
Japan	157.0	26.1	190.0	27.7	290.0[3]	35.8
Netherlands	3.2	5.3	3.5	5.8	8.3	12.9
Spain	25.0	20.6	39.1	28.1	49.4	30.3
Sweden	55.9	42.3	63.4	47.4	63.4	47.0
Switzerland	21.3	39.8	21.5	38.6	21.5	36.3
Turkey	0.0	0.0	0.0	0.0	6.0	5.7
U.K.[4]	52.0	19.5	77.0	28.1	75.0	26.0
U.S.A.	384.0	15.6	574.0	19.6	644.0	18.9
OECD Total	1,145.7	20.7	1,536.7	24.1	1,821.7	25.0

[1]Based on a 1985 annual survey of member countries by the Organisation for Economic Co-operation and Development (OECD), Nuclear Energy Agency (NEA). Figures for 1985 are provisional.
[2]Low estimate.
[3]OECD NEA estimate.
[4]Forecast data were selected by the OECD NEA from a range of estimates provided by the U.K.

Source: OECD Nuclear Energy Agency, *Summary of Nuclear Power and Fuel Cycle Data in OECD Member Countries*, April 1986, table 1.

WORLD NUCLEAR ELECTRICAL CAPACITY AND GENERATION, CURRENT AND PROJECTED

	1984 Nuclear	1984 % of World Total	1990 Nuclear	1990 % of World Total	1995 Nuclear	1995 % of World Total	2000 Nuclear	2000 % of World Total
Capacity (Thousand MWe)	220	10	372- 400	13	415- 518	12-14	502- 702	13-16
Generation (Billion kwh)	1,175	13	2,184-2,355	19-20	2,569-3,205	19-22	3,166-4,417	20-25

Note: Forecast figures are low and high points of projected range.

Source: International Atomic Energy Agency, *Energy, Electricity and Nuclear Power Estimates for the Period up to 2000*, Reference Data Series No. 1, September 1985 Edition, Tables 3 and 4.

WORLD NUCLEAR POWER REACTORS BY TYPE

Status as of December 31, 1985

Type Name	Operational	Construction	Planned
Advanced Gas-Cooled, Graphite-Moderated Reactor	10	4	
Boiling Light-Water-Cooled and Moderated Reactor	79	15	3
Fast Breeder Reactor	6	3	3
Gas-Cooled, Graphite-Moderated Reactor	33		
High-Temperature Gas-Cooled, Graphite-Moderated Reactor	3		
Heavy-Water-Moderated, Boiling Light-Water-Cooled Reactor	1	1	
Light-Water-Cooled, Graphite-Moderated Reactor	28	7	8
Pressurized Heavy-Water-Moderated and Cooled Reactor	24	14	9
Pressurized Light-Water-Moderated and Cooled Reactor	189	113	77
Steam-Generating Heavy-Water Reactor	1		
Other			16
Totals	374	157	116

Source: International Atomic Energy Agency, *Power Reactors in the World*, April 1986, Table 21.

WORLD NUCLEAR POWER AT THE END OF 1985

Country	Reactors In Operation		Reactors Under Construction		Nuclear Electricity Supplied in 1985		
	No. of Units	Total MWe	No. of Units	Total MWe	Billion kwh	% of Total	Rank By Nuclear %
Argentina	2	935	1	692	5.2	11.3*	18
Belgium	8	5,486			32.4	59.8	2
Brazil	1	626	1	1,245	3.2	1.7*	25
Bulgaria	4	1,632	2	1,906	13.1	31.6	7
Canada	16	9,776	6	4,789	57.1	12.7	16
China			1	300			
Cuba			2	816			
Czechoslovakia	5	1,980	11	6,284	10.9	14.6	15
Finland	4	2,310			18.0	38.2	6
France	43	37,533	20	25,017	213.1	64.8	1
East Germany	5	1,694	6	3,432	12.2*	12.0*	17
West Germany	19	16,413	6	6,585	119.8	31.2	8
Hungary	2	825	2	820	6.1	23.6	10
India	6	1,140	4	880	4.0	2.2*	24
Iran			2	2,400			
Italy	3	1,273	3	1,999	6.7	3.8	23
Japan	33	23,665	11	9,773	152.0	22.7	11
Korea (South)	4	2,720	5	4,692	13.9	22.1	12
Mexico			2	1,308			
Netherlands	2	508			3.7	6.1	20
Pakistan	1	125			0.2	0.9	26
Philippines			1	620			
Poland			2	880			
Romania			3	1,980			
South Africa	2	1,840			5.3	4.2	22
Spain	8	5,577	2	1,920	26.8	24.0	9
Sweden	12	9,455			55.9	42.3	4
Switzerland	5	2,882			21.3	39.8	5
Taiwan	6	4,918			27.3*	53.1*	3
United Kingdom	38	10,120	4	2,530	53.8	19.3	13
USA	93	77,804	26	29,258	383.7	15.5	14
USSR	51	27,756	34	31,816	152.0*	10.3*	19
Yugoslavia	1	632			3.9	5.1	21
Total	374	249,625	157	141,942	1,401.6		

*IAEA Estimate

Source: International Atomic Energy Agency, *Power Reactors in the World*, Reference Data Series Number 2, April 1986, Table 7.

WORLD NUCLEAR POWER REACTORS
Average Construction Time Span (in months)

Country	Operating and shut down reactors (initial year of operation)												Reactors under construction (expected initial year of operation)					
	1955 to 1959		1960 to 1964		1965 to 1969		1970 to 1974		1975 to 1979		1980 to 1984		1985		1985 to 1989		1990 to 1994		1995 to 1999	
	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months	Number/	Months
Argentina							1	69			1	108			1	97				
Belgium			1	59			1	62	2	57	2	89	2	83	2	83				
Brazil											1	131					1	169		
Bulgaria							1	51	1	66	2	95			2	68				
Canada			1	48	1	83	5	71	4	69	7	98			5	92	1	76		
China															1	64				
Czechoslovakia							1	172	1	56	2	82	2	92	6	91	5	89	2	138
Finland									2	62	2	76								
France	1	28	2	58	5	67	3	59	6	65	27	65	4	75	19	79	5	82		
East Germany					1	76	2	51	2	72										
West Germany			1	35	6	53	4	58	7	69	6	97	1	174	7	107				
Hungary											2	111			2	90				
India					2	54	1	95			2	155	1	172	3	157	2	99		
Italy			3	48					1	95					2	103	2	123	1	108
Japan			1	37	2	57	8	44	12	60	9	50	2	61	8	58	5	88		
Korea (South)									1	81	2	69	1	80	6	76				
Mexico															1	137	1	161		
Netherlands					1	41	1	48												
Pakistan							1	62												
Philippines															1	119				
Poland																	2	90		
Romania															1	105	2	90		
South Africa											1	93	1	108	1	108				
Spain					1	37	2	56			4	109	1	127	3	109				
Sweden			1	77			4	59	2	51	4	89	2	66	2	66				
Switzerland					1	46	2	49	1	62	1	124								
Taiwan									2	63	3	70	1	72	1	72				
United Kingdom	7	38	9	68	11	68	2	91	5	105	5	179	1	242	3	139				
USA			8	45	9	63	37	63	22	87	19	126	8	131	32	141	1	225	1	249
USSR	2	56	6	78	4	57	8	63	9	77	16	97	5	102	36	84				
Yugoslavia											1	80								
Totals	10	41	33	59	44	61	84	62	80	74	119	94	32	107	145	100	27	101	4	158

Source: *Power Reactors in the World*, Reference Data Series Number 2, International Atomic Energy Agency, April 1986, Table 16

Note: Construction time is measured from first pouring of concrete to grid connection

Figures represent the average construction time in months for the number of reactors beginning operation in the indicated five-year intervals